TABLE II-1 ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, RAW WATER CONVEYANCE RELIABILITY MEASURES

	Τ		PROJECTED FUTURE COSTS ⁽¹⁾								
	ES	TIMATED CURRENT	SH	ORT TERM MEASURE		MODERATE TERM	MOD	ERATE TERM	LONGER TERM		
RELIABILITY MEASURE		CONSTR. COSTS		(2024-2030)	1	MEASURE (2030-2035)	MEASU	RE (2035-2040)	MEASURE (2040-2045)		
		(ENRCC = 13,900)		(ENRCC = 15,150)		(ENRCC = 17,990)	(ENRC	CC = 21,370)	(ENRCC = 25,380)		
Pilot Creek Diversion to Bacon Creek Diversion											
• Complete Trail Clearing and Restoration (3900 FT). ⁽²⁾	\$	35,000	\$	38,150							
Construct Modular Type Bridge Crossing of Pilot Creek.	\$	250,000	\$	272,500							
Construct Safety & Access Improvements,	\$	25,000	\$	27,250							
Pilot Creek Diversion Structure.											
Repair Pilot Creek Diversion Concrete.	\$	15,000	\$	16,350							
Upgrade Pilot Creek Diversion Valve.	\$	35,000					\$	53,800			
Install Automatic Valve Control and Remote	\$	50,000					\$	76,900			
Monitoring Equipment.											
 Widen Trail to 12 Feet for Vehicle Access, Bacon Creek Diversion to Pilot Creek Crossing (± 3000 FT). 	\$	1,275,000							\$ 2,328,000		
Bacon Creek Diversion to Structure 1											
Widen Trail to 12 Feet to Extend Vehicle Access,	\$	850,000			4	\$ 1,100,100					
Bacon Creek Connection to Bacon Creek											
Diversion (± 2000 FT).											
 Replace Open Ditch Sections with HDPE Piped Improvements (± 500 FT).⁽³⁾ 	\$	120,000	\$	130,800							
• Surface Vehicle Access with Minimum 6" A. B. Section	\$	120,000			4	\$ 155,300					
(± 4300 FT).											
Structure 1 to Structure 2											
 Widen Access through Narrows to Provide GDPUD 	\$	425,000	\$	463,200							
Maintenance & Construction Vehicle Access (± 800 FT).											
Replace Open Ditch Section in the "Narrows" with	\$	144,000	\$	156,950							
HDPE Piped Improvements (± 600 FT). ⁽³⁾											

TABLE II-1 ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, RAW WATER CONVEYANCE RELIABILITY MEASURES

	Τ		PROJECTED FUTURE COSTS ⁽¹⁾							
	ES	TIMATED CURRENT	SHO	RT TERM MEASURE		MODERATE TERM	N	IODERATE TERM		LONGER TERM
RELIABILITY MEASURE		CONSTR. COSTS		(2024-2030)	м	1EASURE (2030-2035)	ME	ASURE (2035-2040)	N	IEASURE (2040-2045)
		(ENRCC = 13,900)	(ENRCC = 15,150)		(ENRCC = 17,990)	(ENRCC = 21,370)		(ENRCC = 25,380)
Structure 1 to Structure 2 cont'd)										
• Replace Remaining Open Ditch Sections (± 1900 FT)	\$	855,000			\$	368,850	\$	438,200	\$	520,400
with Piped Improvements.										
• Surface Vehicle Access with Minimum 6" A.B. Section	\$	180,000	\$	196,200						
(± 6450 FT).										
Structure 2 to Structure 3										
Replace with HDPE Piped Improvements, Priority	\$	78,000	\$	85,000						
Repair Open Ditch Sections, Downstream of Structure 2 (± 300 FT). ⁽³⁾										
Replace Remaining Open Ditch Sections with HDPE	\$	2,076,750			\$	895,950	\$	1,064,300	\$	1,264,000
Pipe (± 4615 FT).										
 Widen Ditch Access Road to Minimum 12 Feet. Surface with Minimum 6" A.B. Section (± 9465 FT). 	\$	950,000	\$	1,035,450						
Structure 3 to Structure 4										
• Replace Open Ditch Sections w/ HDPE Piping (± 1315 FT).	\$	591,750			\$	255,300	\$	303,250	\$	360,150
• Widen Ditch Access Road to Minimum 12 Feet.	\$	111,300			\$	144,050				
Surface with Minimum 6" A.B. Section (± 2100 FT).										
<u>Structure 4 to Structure 5</u>										
Complete Replacement of Open Ditch Section with	\$	108,000	\$	117,700						
HDPE Pipe, Priority Repair Area Downstream of										
Structure 4(± 450 FT). ⁽³⁾										
 Replace with HDPE Pipe Remaining Open Ditch 	\$	2,367,000			\$	1,021,150	\$	1,213,000	\$	1,440,650
Sections (± 5260 FT).										
Widen Ditch Access Road to 12 Feet. Surface with	\$	395,650			\$	512,050				
Minimum 6" A.B. Section (± 7465 FT).										
Structure 5 to Structure 6										

TABLE II-1 ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, RAW WATER CONVEYANCE RELIABILITY MEASURES

			PROJECTED FUTURE COSTS ⁽¹⁾								
	ES	TIMATED CURRENT	SHORT T	ERM MEASURE		MODERATE TERM	мс	DDERATE TERM	LONGER TERM		
RELIABILITY MEASURE		CONSTR. COSTS	(20	24-2030)	Μ	IEASURE (2030-2035)	MEAS	SURE (2035-2040)	M	EASURE (2040-2045)	
		(ENRCC = 13,900)	(ENRO	CC = 15,150)		(ENRCC = 17,990)	(EN	NRCC = 21,370)		(ENRCC = 25,380)	
 Replace with HDPE Pipe Open Ditch Sections (± 3435 FT). 	\$	1,545,750			\$	666,850	\$	792,150	\$	940,800	
• Widen Ditch Access Road to 12 Feet. Surface with Minimum 6" A.B. Section (±4325 FT).	\$	229,250			\$	296,700					
 Upgrade Structure 6 with Galvanized Steel Access Platforms and Safety Railings. 	\$	10,000	\$	10,900							
Structure 6 to Structure 7											
Replace with HDPE Pipe Open Ditch Sections (± 2900 FT).	\$	1,305,000			\$	563,000	\$	666,800	\$	794,300	
• Widen Ditch Access Road to 12 Feet. Surface with Minimum 6" thick A.B. Section (± 2990 FT).	\$	150,500					\$	243,700			
 Upgrade Structure 7 with Galvanized Steel Access Platforms and Safety Railing. 	\$	10,000	\$	10,900							
Structure 7 to Tunnel Hill Inlet											
• Replace with HDPE Pipe Open Sections (± 480 FT).	\$	216,000					\$	332,100			
• Widen Ditch Access Road to 12 Feet. Surface with Minimum 6" thick A.B. Section (± 1880 LF).	\$	99,500			\$	128,800					
Bacon Creek Diversion to Tunnel Hill Inlet											
 Purchase Heavy Duty Tree Clearing Removal and Lift Equipment. 	\$	250,000	\$	272,500							
Maintain Erosion Control Measures (annual cost).	\$	20,000 ⁽⁴	⁾ \$	21,800 ⁽⁴⁾	\$	25,900 ⁽⁴⁾	\$	30,750 ⁽⁴⁾	\$	36,500 ⁽⁴⁾	
• Improve Grizzly Debris Racks with Stepped Platforms, (± 12 Locations).	\$	60,000	\$	32,700	\$	38,850					
Tunnel Hill Outlet to Buckeye Powernouse			1		1				1		

TABLE II-1 ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, RAW WATER CONVEYANCE RELIABILITY MEASURES

Current (Jan. 2024) ENRCC = 13,900

			PROJECTED FUTURE COSTS ⁽¹⁾								
	ESTI	IMATED CURRENT	SHC	ORT TERM MEASURE		MODERATE TERM	₽	10DERATE TERM	LONGER TERM		
RELIABILITY MEASURE	C	CONSTR. COSTS		(2024-2030)	Ν	/IEASURE (2030-2035)	ME	ASURE (2035-2040)	MEASURE (2040-2045)		
	(E	NRCC = 13,900)		(ENRCC = 15,150)		(ENRCC = 17,990)	(1	ENRCC = 21,370)	(ENRCC = 25,380)		
• Construct Concrete Ditch Lining Improvements Downstream of Balderston Road Crossing (± 650 FT). ⁽³⁾	\$	32,500	\$	35,450							
 Stabilize Balderston Wastegate Foundation; Place Erosion Control Measures at Wastegate Discharge. 	\$	23,500	\$	25,600							
 Gas Powered Steel Blade Cutter and Skid Steer Mounted Tiller. 	\$	85,000	\$	92,650							
• Conduct Semi Annual Clearing of Berry Vines (annual cost).	\$	12,800 ⁽⁴⁾	\$	13,950 ⁽⁴⁾	ç	16,550 ⁽⁴⁾	\$	19,700 ⁽⁴⁾	\$ 23,400 ⁽⁴⁾		
• Dredge Walton Lake to Restore Storage Capacity. (± 14.0 ac-ft).	\$	252,000			\$	326,150					
 Record Permanent Pipeline and Access Easements for the Tunnel Hill Penstock, Canyon Creek Conduit and Buckeye Conduits. (Est. @ 19 parcels). 	\$	66,500	\$	36,250	\$	43,050					
 Conduct Annual Clearing of Trees and Brush Within Tunnel Hill Penstock, Canyon Creek Conduit and Buckeye Corridors (annual cost). 	\$	9,000 ⁽⁴⁾	\$	9,800 ⁽⁴⁾	\$	11,650 ⁽⁴⁾	\$	13,850 ⁽⁴⁾	\$ 16,450 ⁽⁴⁾		
Line and Coat Tunnel Hill Penstock.	\$	15,000			\$	19,400					
 <u>Buckeye Powerhouse to Taylor Mine Outlet</u> Construct Concrete Ditch Lining of Open Ditch Section Downstream of Concrete Lined Section, Upstream of Taylor Mine Outlet (± 700 FT).⁽³⁾ 	\$	35,000	\$	38,150							
• Construct New Water Storage Reservoir near GDPUD Office and Shop; Estimated Capacity 20 to 25 acre-ft.	\$	2,521,000					\$	3,875,800			
Buckeye Powerhouse to Taylor Mine Outlet (cont'd) • Record Permanent Pipeline and Access Easements for	\$	59,500	\$	32,500	\$	28,500					

TABLE II-1 ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, RAW WATER CONVEYANCE RELIABILITY MEASURES

Current (Jan. 2024) ENRCC = 13,900

			PROJECTED FUTURE COSTS ⁽¹⁾								
	ES	TIMATED CURRENT	SHO	ORT TERM MEASURE		MODERATE TERM	Ν	IODERATE TERM		LONGER TERM	
RELIABILITY MEASURE		CONSTR. COSTS		(2024-2030)	N	MEASURE (2030-2035)	ME	ASURE (2035-2040)	N	IEASURE (2040-2045)	
	((ENRCC = 13,900)		(ENRCC = 15,150)		(ENRCC = 17,990)	(ENRCC = 21,370)		(ENRCC = 25,380)	
the Schroeder and Buffalo Hill Pipeline Conduits. (Est. @ 17 Parcels).											
Conduct Semiannual Clearing of Berry Vines (annual cost).	\$	18,000 ⁽⁴⁾	\$	19,600 ⁽⁴⁾	Ş	\$ 23,300 ⁽⁴⁾	\$	27,700 ⁽⁴⁾	\$	32,850 ⁽⁴⁾	
• Conduct Annual Clearing of Brush & Trees within Schroeder Conduit and Buffalo Hill Pipeline Corridors (annual cost).	\$	6,500 ⁽⁴⁾	\$	7,100 ⁽⁴⁾	\$	8,400 ⁽⁴⁾	\$	10,000 ⁽⁴⁾	\$	11,900 ⁽⁴⁾	
 <u>Taylor Mine Outlet to Jackass Wastegate</u> Construct Concrete Ditch Lining Upstream Growlersburg Wastegate (± 200 FT). 	\$	10,000	\$	10,900							
 Upgrade Spools Wastegate and Flume Similar to Improvements Completed at Summers Wastegate. 	\$	25,000			\$	35,350					
 Provide Waterproof Coating for Summers Wastegate and Flume and Spools Wastegate and Flume. 	\$	10,000			\$	5 12,950					
 Construct Concrete Ditch Lining Upstream of Summers Wastegate (± 1000 FT).⁽³⁾ 	\$	50,000	\$	54,500							
 Construct Concrete Ditch Lining Between Spools Wastegate and Hocket Hollow Pipeline Outlet (± 1200 FT).⁽³⁾ 	\$	60,000									
• Conduct Semiannual Clearing of Berry Vines (annual cost).	\$	3,500 ⁽⁴⁾	\$	3,850 ⁽⁴⁾	\$	4,500 ⁽⁴⁾	\$	5,400 ⁽⁴⁾	\$	6,400 ⁽⁴⁾	
 Jackass Wastegate to Sweetwater Trail WTP Construct Concrete Lining of Ditch Between Syd Road and Kaiser Pipeline (± 2200 FT).⁽³⁾ 	\$	110,000	\$	119,900							
 Concrete Line Ditch Downstream of Jackass Wastegate and Upstream of Falls Section (± 1350 FT).⁽³⁾ 	\$	67,500	\$	73,600							
Jackass Wastegate to Sweetwater Trail WTP (cont'd) • Concrete Line Ditch Upstream of Greenwood	\$	150,000					\$	230,600			

K A S L

TABLE II-1 ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, RAW WATER CONVEYANCE RELIABILITY MEASURES

	1		PROJECTED FUTURE COSTS ⁽¹⁾								
	ESTI	MATED CURRENT	ѕно	RT TERM MEASURE		MODERATE TERM	Ν	NODERATE TERM		LONGER TERM	
RELIABILITY MEASURE	C	ONSTR. COSTS		(2024-2030)	Μ	EASURE (2030-2035)	ME	ASURE (2035-2040)	м	EASURE (2040-2045)	
	(E	NRCC = 13,900)	(ENRCC = 15,150)		(ENRCC = 17,990)	(ENRCC = 21,370)		(ENRCC = 25,380)	
Reservoir (± 3000 FT). ⁽³⁾											
• Replace with 24" DIP Remaining Sections of 22" Steel	\$	247,500			\$	320,350					
Pipe, Kaiser Pipeline and Kaiser Siphon (\pm 1650 FT).											
 Conduct Maintenance Dredging of Greenwood 	\$	450,000			\$	582,400					
Reservoir and Sweetwater Trail Reservoir to Restore/ Enhance Capacity.											
Record Permanent Pipeline and Access Easements	\$	21,000	\$	11,500	\$	13,600					
for Kaiser Siphon, Kaiser Pipeline and Ford Siphon. (Est. 6 Parcels).											
Line Ditch Between Ford Siphon Outlet and Rita Court	\$	50,000	\$	54,500							
Pipeline Crossing, (± 100 FT).											
• Conduct Annual Clearing of Brush & Trees within Kaiser	\$	2,500 ⁽⁴⁾	\$	2,750 ⁽⁴⁾	\$	3 <i>,</i> 250 ⁽⁴⁾	\$	3,850 ⁽⁴⁾	\$	4550 ⁽⁴⁾	
Pipeline, Kaiser Siphon, Ford Siphon Corridors (annual cost).											
• Conduct Semiannual Clearing of Berry Vines (annual cost).	\$	7,500 ⁽⁴⁾	\$	8,200 ⁽⁴⁾	\$	9,700 ⁽⁴⁾	\$	11,550 ⁽⁴⁾	\$	13,700 ⁽⁴⁾	
Replace Manual Sweetwater Trail WTP Supply Gate	\$	40,000							\$	73,050	
with Automatic Controls.											
TOTAL ESTIMATED CURRENT CONSTRUCTION COSTS ⁽⁴⁾	\$	19,314,450									
TOTAL ESTIMATED FUTURE CONSTRUCTION COSTS ⁽⁴⁾			\$	3,452,050	\$	7,528,700	\$	9,290,600	\$	7,721,350	

(1) FUTURE COSTS ASSUME AVG 3.5% PER YEAR INCREASE IN ENRCC, ENRCC CALCULATED FOR MIDPOINT OF EACH TERM.

(2) WORK TO BE COMPLETED BY GROWLERSBURG CONSERVATION CORPS FORCES.

(3) IMPROVEMENTS TO BE CONSTRUCTED BY GDPUD STAFF.

(4) ANNUAL ESTIMATED MAINTENANCE COSTS NOT INCLUDED IN ESTIMATED CONSTRUCTION COSTS.

CONSULTING

TABLE II-2ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS,TREATED WATER PUMPING, STORAGE AND DISTRIBUTION FACILITIES

Current (Jan. 2024) ENRCC = 13,900

	Τ		PROJECTED FUTURE COSTS ⁽¹⁾								
	ES	TIMATED CURRENT	SH	IORT TERM MEASURE		MODERATE TERM	MODERATE TERM		Γ	LONGER TERM	
RELIABILITY MEASURE		CONSTR. COSTS		(2024-2030)	м	1EASURE (2030-2035)	M	EASURE (2035-2040)	N	/IEASURE (2040-2045)	
		(ENRCC = 13,900)		(ENRCC = 15,150)		(ENRCC = 17,990)		(ENRCC = 21,370)		(ENRCC = 25,380)	
Booster Pump Stations	Τ				Γ				Γ		
 Modify Pump Control Panels for Connection to Portable Generator (all 5 locations). 	\$	267,500	\$	291,550							
 Install Unit Heaters and/or Insulate Booster Pump Piping to Protect from Freezing (4 locations). 	\$	14,000	\$	15,250							
• Replace Black Ridge Pump Station with Duplex Pump Station Equipment, New Control Panel, SCADA Capability and New Pump Station Structure.	\$	148,000	\$	161,300							
Replace Chipmunk Trail Pump Station Pumps & Motors.	\$	15,000			\$	19,400					
 Reconnect Chipmunk Trail Pump Station Controls with Hotchkiss Hill Sub-Tank Level Signals. 	\$	39,000			\$	50,500					
Improve Instrumentation at Irish Lane Pump Station.	\$	22,500			\$	29,100					
 Modify Angel Camp Tank SCADA to Include Angel Camp Pump Station Controls. 	\$	39,000					\$	59,950			
 Install Remote Monitoring of Pump Operating Control Signals with Cellular Based SCADA System. 	\$	62,500							\$	114,100	
 Conduct Annual Servicing of Booster Pump Station Equipment by Pump Station Equipment Supplier(s). (annual cost). 	\$	15,000 ⁽²⁾	\$	16,350 ⁽²⁾	\$	19,400 ⁽²⁾	\$	23,100 ⁽²⁾	\$	27,400 ⁽²⁾	
 <u>Water Storage Tanks</u> Conduct Tank Inspection by Certified Corrosion and Coating Consultants Every 3 to 5 Years. 	\$	50,000	\$	54,500	\$	64,700	\$	76,900	\$	91,300	
 Install Motion or Switch Operated Service Lighting at Tank Access Gates and at Tank Exterior Ladders. 	\$	45,000	\$	49,050							
• Recoat Angel Camp Tank Interior and Exterior Surfaces.	\$	261,000	\$	284,500							

TABLE II-2

Current (Jan. 2024) ENRCC = 13,900

ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, TREATED WATER PUMPING, STORAGE AND DISTRIBUTION FACILITIES

			PROJECTED FUTURE COSTS ⁽¹⁾							
	EST	TIMATED CURRENT	SH	ORT TERM MEASURE		MODERATE TERM	MODERATE TERM		LONGER TERM	
RELIABILITY MEASURE		CONSTR. COSTS		(2024-2030)		MEASURE (2030-2035)	М	EASURE (2035-2040)	м	EASURE (2040-2045)
	((ENRCC = 13,900)		(ENRCC = 15,150)		(ENRCC = 17,990)		(ENRCC = 21,370)		(ENRCC = 25,380)
Water Storage Tanks (cont'd)										
 Recoat Interior and Exterior Surfaces, Hotchkiss Hill Tank and Hotchkiss Hill Sub-Tank. 	\$	327,000	\$	356,400						
 Conduct Coating Repairs (7 Tank locations). 	\$	35,000	\$	38,150						
• Recoat Interior and Exterior Surfaces Black Oak Mine Tank, Deer Ravine Tank.	\$	345,000			!	\$ 446,500				
 Recoat Interior and Exterior Surfaces Spanish Dry Diggins, Garden Park, Kelsey Tanks. 	\$	480,500					\$	747,950		
 Recoat Interior and Exterior Surfaces Walton Lakes WTP Tanks. 	\$	364,400							\$	665,350
 With Recoating of Tanks, Install Passive Cathodic Protection. 	\$	350,000	\$	114,450	2	\$ 90,600	\$	161,450	\$	127,800
 Improve Grading and Install All Weather Surfacing Walton Lakes WTP Tanks, (± 300 FT). 	\$	27,500							\$	50,200
 Repair or Replace 12 Inch Water Main Within Hotchkiss Hill Tank Access Road, (± 650 FT). 	\$	81,250	\$	88,550						
 Regrade and Install All Weather Surfacing, Hotchkiss Hill Tank Access Road. 	\$	47,500	\$	51,800						
 Replace 1/2 Tank Level Gauge, Hotchkiss Hill Tank. 	\$	5,000	\$	5,450						
 Install Pressure Transducer and Level Transmitting Equipment Hotchkiss Hill Sub-Tank. 	\$	34,500	\$	37,600						
 Install Mechanical Mixing Equipment, Hotchkiss Hill Sub-Tank. 	\$	17,500	\$	19,100						

CONSULTING

TABLE II-2 STRUCTION COSTS AND ANNUAL MAINT

Current (Jan. 2024) ENRCC = 13,900

ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, TREATED WATER PUMPING, STORAGE AND DISTRIBUTION FACILITIES

			PROJECTED FUTURE COSTS ⁽¹⁾							
	EST	TIMATED CURRENT	SHORT TERM MEASURE		MODERATE TERM	MODERATE TERM		LONGER TERM		
RELIABILITY MEASURE		CONSTR. COSTS	(2024-2030)	N	1EASURE (2030-2035)	M	EASURE (2035-2040)	MEASURE (2040-2045)		
	((ENRCC = 13,900)	(ENRCC = 15,150)		(ENRCC = 17,990)	((ENRCC = 21,370)	(ENRCC = 25,380)		
Water Storage Tanks (cont'd) • Install Second Kelsey Tank; Include Flexible Tank Connections, Modify Inlet and Outlet Piping , Add Pipe Mixing and Sample Ports.	\$	852,000		\$	1,102,700					
 Install Second Garden Park Tank; Include Flexible Tank Connections, Modify Inlet and Outlet Tank Piping, Tank Mixing and Sample Ports. 	\$	852,000				\$	1,309,900			
 Install All Weather Surfacing and Grading Improvements, Garden Park Tank Access Road, (± 2200 FT). 	\$	161,000				\$	247,500			
 Install Grading, Retaining Wall, Drainage, Slope and Erosion Protection, Black Oak Mine Tank Site. 	\$	43,800		\$	56,700					
 Replace Damaged Asphalt and Regrade Finished Pavement, Black Oak Mine Tank Site, (± 3000 sq.ft). 	\$	18,800		\$	24,350					
 Rehabilitate / Replace Deer Ravine Tank Altitude Valve and Tank Inlet / Outlet Valves. 	\$	40,000	\$ 43,600							
 Install All Weather Surfacing, Grading Improvements, Deer Ravine Tank Access Road, (± 500 FT). 	\$	36,500		\$	47,250					
 Install Second Spanish Dry Diggins Tank; Include Flexible Tank Connections, Modify Tank Inlet and Outlet Piping, Add Tank Mixing and Sample Ports. 	\$	852,000						\$ 1,555,650		
 Wrap and Protect Spanish Dry Diggins Pressure Transducer Service Line. 	\$	2,500	\$ 2,750							
 Install Second Angel Camp Tank; Install Valve Vault and Pressure Reducing Valve to Provide Bypass of Pumped Supply from Sweetwater Trail WTP to Cascade Trail Main. 	\$	1,280,000	\$ 1,395,100							

ONSULTING KASL

ENGINEERS

TABLE II-2

ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS,

Current (Jan. 2024) ENRCC = 13,900

TREATED WATER PUMPING, STORAGE AND DISTRIBUTION FACILITIES

			PROJECTED FUTURE COSTS ⁽¹⁾							
	EST	IMATED CURRENT	SH	ORT TERM MEASURE		MODERATE TERM		MODERATE TERM	LONGER TERM	
RELIABILITY MEASURE	(CONSTR. COSTS		(2024-2030)	м	IEASURE (2030-2035)	м	IEASURE (2035-2040)	MEASURE (2040-2045)	
	()	ENRCC = 13,900)		(ENRCC = 15,150)		(ENRCC = 17,990)		(ENRCC = 21,370)	(ENRCC = 25,380)	
Water Transmission and Distribution Mains										
Replace with C 900 Pressure Class 235 or Pressure Class 305 Class Pipe Existing PVC SDR 21 Pipelines										
Located at:										
° Reservoir Road; ± 12,000 LF, 8" Pipe.	\$	960,000	\$	1,046,300						
° Sliger Mine Road; 8800 LF, 8" Pipe.	\$	704,000	\$	767,300						
° Chrysler Circle / Johntown Creek Road; ± 7000 LF, 8" Pipe.	\$	360,000	\$	392,400						
° Fain Lane and Prospect Hill Road; ± 5800 LF, 12" Pipe.	\$	580,000	\$	632,150						
° Aaron Cool Drive ±1200 LF, 8" Pipe	\$	96,000			\$	124,250				
 ° Cherry Acres Road, Hamblin Way, Overton Road; ± 7500 LF, 8" Pipe. 	\$	600,000			\$	776,550				
° Meadowbrook Road, ± 1800 LF, 8" Pipe	\$	144,000			\$	186,400				
° Towzen Dr,. Oak Lane; ± 1250 LF, 8" Pipe.	\$	100,000			\$	129,400				
PRV Stations										
Repair / Upgrade Sweetwater Trail System PRV Stations,	\$	240,000	\$	261,600						
(6 locations).										
• Repair / Upgrade Walton Lake PRV Stations (10 locations).	\$	400,000			\$	362,400	\$	184,500		
Fire Hydrants		(2)		(2)		(2)		(2)		
 Flow Test Hydrants at Max. 5 Year Intervals (annual cost). (± 525 Hydrants; Flow Test ± 105/Yr). 	\$	13,125 ⁽²⁾	\$	14,300 ⁽²⁾	\$	17,000 ⁽²⁾	\$	20,200 ⁽²⁾	\$ 23,950 ⁽²⁾	
Water System Valves • Exercise Water System Valves Annually (annual cost).	\$	30,000 ⁽²⁾	\$	32,700 ⁽²⁾	\$	38,825 ⁽²⁾	\$	46,125 ⁽²⁾	\$ 54,800 ⁽²⁾	

ENGINEERS

TABLE II-2

ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS,

Current (Jan. 2024) ENRCC = 13,900

TREATED WATER PUMPING, STORAGE AND DISTRIBUTION FACILITIES

			PROJECTED FUTURE COSTS ⁽¹⁾								
	ESTIMAT	ED CURRENT	SHORT TERM MEASURE	MODERAT	E TERM	MODER	ATE TERM	LONGE	RTERM		
RELIABILITY MEASURE	CONST	rr. costs	(2024-2030)	MEASURE (2	030-2035)	MEASURE	(2035-2040)	MEASURE	(2040-2045)		
	(ENRCC	C = 13,900)	(ENRCC = 15,150)	(ENRCC =	17,990)	(ENRCC	. = 21,370)	(ENRCC =	= 25,380)		
Fire Flows											
• Replace 4" Diameter Mains with Minimum 8" Diameter PVC C 900 Pressure Class 235 or Pressure Class 305 Pipe.											
° Water Main Connection Hidden Gold Park to Tegra Road, (± 8000 LF).	\$	640,000				\$	983,950				
° Longview Ln., Reservoir Ct. to Longview Ln., (± 2400 LF).	\$	192,000				\$	295,200				
° Marshall Road, Johntown Creek Road to Garden Valley Road, (± 6000 LF).	\$	480,000				\$	737,950				
° Roller Coaster Road, South of Chrysler Road, (±2500 LF).	\$	200,000				\$	307,500				
° Garden Park Drive South of Shasta Road, (± 2650 LF).	\$	212,000				\$	325,950				
° Pikes Peak Circle, (± 3350 LF).	\$	268,000				\$	412,050				
° Shasta Road, (± 1950 LF).	\$	156,000						\$	284,850		
 Tegra Road, Replace and Increase Pipe from 6" to 10" Diameter, Hidden Gold Trail to Buds Alley, (± 2100 LF). 	\$	189,000		\$	244,600						
 Brinks Lane, Upper Black Rock Road, Replace and Increase Pipe from 6" to 8" South of Balloon Ridge Trail, (±2950 LF). 	\$	236,000		\$	305,450						
• Rattlesnake Bar Road, Replace and Increase Pipe from 6" to 8", (±3350 LF).	\$	262,000		\$	337,400						
 Greenwood Road, Replace and Increase Pipe from 6" to 10", Marshall Road to FH 106, (±8900 LF). 	\$	801,000		\$	1,036,700						
• Hackomiller Road, Replace and Increase Pipe from 6" to 8" Black Oak Mine Road to end, (± 4900 LF).	\$	392,000		\$	504,800						

TABLE II-2

Current (Jan. 2024) ENRCC = 13,900

ESTIMATED CONSTRUCTION COSTS AND ANNUAL MAINTENANCE COSTS, TREATED WATER PUMPING, STORAGE AND DISTRIBUTION FACILITIES

				PROJECTED FL	JTURE COSTS ⁽¹⁾				
RELIABILITY MEASURE	ESTIMATED CUR CONSTR. COS	RENT STS	SHORT TERM MEASURE (2024-2030)	MODERATE TERM MEASURE (2030-2035)	MODERATE TERM MEASURE (2035-2040)	LONGER TERM MEASURE (2040-2045)			
	(ENRCC = 13,9	00)	(ENRCC = 15,150)	(ENRCC = 17,990)	(ENRCC = 21,370)	(ENRCC = 25,380)			
Fire Flows (cont'd)									
 Tiger Lane, Veterans Way and Ciabria Lane, Replace and Increase Pipe from 6" to 10" (± 2500 LF). 	\$ 22	5,000			\$ 345,900				
 Meadowbrook Road, Replace and Increase Pipe from 6" to 8" (± 1350 LF). 	\$ 10	8,000			\$ 166,050				
 Dogwood Lane / Breadline Road, Replace and Increase Pipe from 6" to 8", (± 2100 LF). 	\$ 16	8,000			\$ 258,300				
 Conduct Detailed Evaluation of GDPUD Network Model to Identify Adding Booster Pump Station, Water Storage Facilities and Treatment Plant Improvements to Further Improve Fire Flows. 	\$ 25	0,000	\$ 272,500						
TOTAL ESTIMATED CURRENT CONSTRUCTION COSTS ⁽²⁾	\$ 16,18	0,250							
TOTAL ESTIMATED FUTURE CONSTRUCTION COSTS (2)			\$ 6,381,350	\$ 5,939,750	\$ 6,621,000	\$ 2,889,250			

(1) FUTURE COSTS ASSUME AVG 3.5% PER YEAR INCREASE IN ENRCC, ENRCC CALCULATED FOR MIDPOINT OF EACH TERM.(2) ANNUAL ESTIMATED MAINTENANCE COSTS NOT INCLUDED IN CONSTRUCTION COSTS.



TABLE III-1 RAW WATER CONVEYANCE FACILITIES

				RECOMMENDED ASSET IMP	ROVEMENTS	PRIORITY
	(T	(TEMP.)	CONDITION SCORF		Eurnich / Install Now Assot	
EXISTING ASSET		ASSET	(1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Replace Existing	H. M. L ⁽²⁾
Pilot Crock Diversion Pilot		VOIVIBER	()			
Creek to Bacon Creek Diversion						
Pipeline						
• Access	1964 U	UC5-010	1	Complete Trail Clearing Bacon Creek to Pilot Hill		Н
				Diversion.		
				• Complete Trail Widening for Vehicle Access.		L
					Install New Modular Bridge	ц
					Crossing of Pilot Creek.	п
• Pipeline	1964 U	UC5-011	8			
P			-			
Diversion Structure	1964 U	UC5-012	2	Repair Spalled Concrete.		н
				Install Safety Ladder Safety Bailings Diversion		н
				Channel Crossing.		
Diversion Valve &	1964 U	UC5-013	3		 Install Motor Operated, 	М
Valve Operator					Automatically Controlled Diversion	
					Valve Equipment.	
UpCountry Ditch, Bacon Creek						
to Tunnel Hill						
Access	1964 UC	JC4/5-011	2	Construct Ditch Maintenance Access Road		н
			-	through the Narrows.		
				• Extend Ditch Maintenance Access Road to Bacon		м
				Creek Diversion.		
				Widen Existing Ditch Maintenance Access Road		н
				and Install Base Rock Improvements.		
 Access Pipeline Diversion Structure Diversion Valve & Valve Operator UpCountry Ditch, Bacon Creek to Tunnel Hill Access 	1964 Uu 1964 Uu 1964 Uu 1964 Uu 1964 Uu	UC5-010 UC5-011 UC5-012 UC5-013	1 8 2 3	 Complete Trail Clearing Bacon Creek to Pilot Hill Diversion. Complete Trail Widening for Vehicle Access. Repair Spalled Concrete, Install Safety Ladder, Safety Railings, Diversion Channel Crossing. Construct Ditch Maintenance Access Road through the Narrows. Extend Ditch Maintenance Access Road to Bacon Creek Diversion. Widen Existing Ditch Maintenance Access Road and Install Base Rock Improvements. 	 Install New Modular Bridge Crossing of Pilot Creek. Install Motor Operated, Automatically Controlled Diversion Valve Equipment. 	н



				RECOMMENDED ASSET IMP	ROVEMENTS	PRIORITY
EXISTING ASSET	YEAR INSTALLED	(TEMP.) ASSET NUMBER ⁴	CONDITION SCORE (1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Furnish / Install New Asset; Replace Existing	H, M, L ⁽²⁾
UpCountry Ditch, Bacon Creek to Tunnel Hill (cont'd)						
Piped Sections	1964-2023	UC4/5-011	8	 Replace Grizzly Debris Racks with Stepped Platforms. 		Н
Open Ditch Sections	1964	UC4/5-014	3	 Maintain / Update Straw Bale Erosion Control Measures. 		Н
					 Acquire Heavy Duty Clearing and Lifting Equipment. 	Н
				 Replace Priority Repair Ditch Sections with HDPE Pipe. 		Н
				 Replace Remaining Open Ditch Sections with HDPE Pipe. 		H,M,L
				 Update Wildfire Response Plan. 		Н
• Structures	1964	UC4/5-012	7	 Modify Structure 6 and 7 with Steel Access Platforms and Safety Railings. 		Н
 Flow Monitoring 	1990	UC4-015	8		 Replace Flow Measuring Equipment, Tunnel Hill Inlet. 	Μ



			RECOMMENDED ASSET IMPROVEMENTS		PRIORITY	
EXISTING ASSET	YEAR INSTALLED	(TEMP.) ASSET NUMBER ⁴	CONDITION SCORE (1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Furnish / Install New Asset; Replace Existing	H, M, L ⁽²⁾
Tunnel Hill to Buckeye Powerhouse Ditch System						
• Access	1964	UC2/3-010	2	 Improve Mechanical Removal of Berry Vine Intrusion. (3) 	 Acquire Steel Blade Brush Cutting Equipment. (3) 	H H, M, L
					• Acquire Skid Steer Masticator / Tiller Equipment. (3)	Н
 Wastegates 	1964	UC2-012	3	 Repair Balderston Wastegate Structure, Install Channel Erosion Control Measures. 		Н
•Conduits	1964	UC2/3-016	5	 Record Permanent Easements, Tunnel Hill Penstock, Canyon Creek Conduit, Buckeye Conduit. 		H,M, L
				 Line and Coat Tunnel Hill Penstock. Clear Vegetation / Tree Growth within Conduit Corridors. 		M H,M,L
• Ditch Sections	1964	UC2/3-014	7	 Complete Ditch Lining of Priority Repair Area, 650 FT. Balderston Road. 		Н
• Storage	1964	UC2-017	4	• Expand Walton Lake Capacity.		М



		RECOMMENDED ASSET IMPROVEMENTS		ROVEMENTS	PRIORITY	
EXISTING ASSET	YEAR INSTALLED	(TEMP.) ASSET NUMBER ⁴	CONDITION SCORE (1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Furnish / Install New Asset; Replace Existing	H, M, L ⁽²⁾
Buckeye Power Plant to Taylor Mine Outlet Ditch System						
• Access	1964	UC1/K4/	2	Improve Mechanical Removal of Berry Vine		H, M, L
		PH7-010		Intrusion. (3)	 Acquire Steel Blade Brush Cutting Equipment. (3) 	н
					 Acquire Skid Steer Masticator / Tiller Equipment (3) 	Н
Ditch Improvements	1964-2020	UC1/K4/ PH7-010	7	 Complete Ditch Lining, Priority Repair Area, ±700 Feet, Upstream Taylor Mine Outlet. 		Н
• Conduits	1964	UC1/K4/ PH7-016	5	 Clear Vegetation / Tree Growth Schroeder and Buffalo Hill Conduit Corridors. 		Н
				 Record Permanent Easements, Schroeder and Buffalo Hill Conduits. 		H, M, L
• Storage	N/A	K4-017	N/A		 Construct New Raw Water Reservoir at GDPUD Office / Shop Area Parcel. 	Μ
Taylor Mine Outlet to Jackass Wastegate Ditch System						
• Access	1964	PH7/PH5- 010	2	 Improve Mechanical Removal of Berry Vine Intrusion. (3) 		H, M, L
					Acquire Steel Blade Brush Cutting Equipment (3)	Н
					Acquire Skid Steer Masticator / Tiller Equipment (3)	Н



				RECOMMENDED ASSET IMP	ROVEMENTS	PRIORITY
EXISTING ASSET	YEAR INSTALLED	(TEMP.) ASSET NUMBER ⁴	CONDITION SCORE (1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Furnish / Install New Asset; Replace Existing	H, M, L ⁽²⁾
Taylor Mine Outlet to Jackass Wastegate Ditch System (cont'd)						
• Ditch Improvements	1964	РН7/РН5- 014	5	• Ditch Lining Improvements; Upstream Growlersburg Wastegate, Upstream Summers Wastegate, Spools Wastegate to Hockett Hollow Outlet, Replace Old Deteriorated Lining.		H, M, L
• Structures	1964	РН7/РН5- 018	5	 Upgrade Spools Wastegate. Line and Coat Flumes. 		M M
Jackass Wastegate to						
Sweetwater Trails WTP Ditch						
System						
• Access	1964	PH5/PH4-	2	 Improve Mechanical Removal of Berry Vine 		H, M, L
		010		Intrusion. (3)	 Acquire Steel Blade Brush Cutting Equipment. (3) Acquire Skid Steer Masticator / Tiller Equipment (3) 	н н
• Conduits	1964	РН5/РН4- 016	4	• Record Permanent Easements, Kaiser Siphon.	•Replace ± 1250 FT Section and ±400 Ft Section of Kaiser Siphon.	М Н, М



TABLE III-1 RAW WATER CONVEYANCE FACILITIES

				RECOMMENDED ASSET IMP	ROVEMENTS	PRIORITY
EXISTING ASSET	YEAR INSTALLED	(TEMP.) ASSET NUMBER ⁴	CONDITION SCORE (1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Furnish / Install New Asset; Replace Existing	H, M, L ⁽²⁾
Jackass Wastegate to Sweetwater Trails WTP Ditch System (cont'd)						
• Ditch Improvements	1964	РН4/РН5- 014	4	 Clear Vegetation along Falls, Spanish Dry Diggins to Syd Road. Complete Concrete Ditch Lining ± 3000 Ft Upstream of Greenwood Res, ± 2200 Ft., Syd Road to Kaiser Wastegate, Upstream of Rita Ct. Crossing. 	• Install Flow Control Equipment, Sweetwater Trail WTP Supply.	H, M, L H, M, L L
• Storage	1964	РН4/РН5	5	 Increase Capacity of Greenwood Reservoir. 		М

Footnotes:

- (1) Condition Score; 1 = Poor to 10 = Very Good.
- (2) H, High, Short Term Priority, Recommended for Implementation 2024 2030.
 M, Moderate Term Priority, Recommended for Improvements 2030 2040.
 - L, Longer Term Priority , Recommended for Improvements 2040-2045.
- (3) Asset Improvements Recommended for Use in All Open Ditch Sections.

- (4) Temp Asset Numbers
 - UC1-5 UpCountry Ditch System Plans
 - K4 Kelsey Ditch System Plans
 - PH4-7 Pilot Hill Ditch System Plans
 - 010 Access
 - 011 Piped Ditch Section
 - 012 Structure
 - 013 Valve
 - 014 Open Ditch Section
 - 015 Flow Monitoring
 - 016 Conduit, Siphon
 - 017 Storage
 - 018 Flume

KASL

TABLE III-2

				RECOMMENDED ASSET IMP	ROVEMENTS	PRIORITY
EXISTING ASSET	YEAR INSTALLED	(TEMP.) ASSET NUMBER ³	CONDITION SCORE (1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Furnish / Install New Asset; Replace Existing	H, M, L ⁽²⁾
GDPUD Booster Pump Stations						
All (5) Pump Stations	1972-1979	(Refer to Following Specific Pump Structures)		 Conduct Annual Servicing of Pump Station Mechanical and Electrical Equipment. 		H,M,L
				• Modify Pump Control Panels for Manual Transfer to Portable Generator.		Н
				 Install Freeze Protection Insulation for Pump Station Piping or Unit Heaters for Pump Stations. 		Н
					 Install Cellular Based Booster Pump Station SCADA System. 	L
Specific GDPUD Pump Stations						
•Chipmunk Trail	1974	WL2-020	5	 Rehabilitate / Replace Chipmunk Trail Booster Pumps. 		М
				 Reinstall Hotchkiss Hill Subtank Level Control Signal. 		М
•lrish Lane	1979	WL7-020	4	 Replace / Upgrade Pump Stations Instruments and Gauges. 		М
• Black Ridge	1975	ALT7-020	1		• Install new Duplex Pump Station Equipment.	Н
					Replace Existing Pump Station Structure.	Н
					Replace Pump Control Panel.	Н
• Angel Camp	1972	ALT1-020	7	 Modify Angel Camp Tank SCADA Improvements to Include Booster Pump Station Controls and Alarms. 		М



TABLE III-2 TREATED WATER FACILITIES

				RECOMMENDED ASSET IMP	ROVEMENTS	PRIORITY
	YEAR	(TEMP.) ASSET	CONDITION SCORE		Furnish / Install New Asset;	(2)
EXISTING ASSET	INSTALLED	NUMBER ³	(1-10)(1)	Rehabilitate / Modify Existing Asset	Replace Existing	H, M, L ⁽²⁾
 Reservoir Road 	1977	WL3-020	6	 Refer to Recommended Asset Improvements for all GDPUD Pump Stations. 		H, M, L
GDPUD Water Storage Tanks						
All (10) Water Storage Tanks	1971-1990	(Refer to Specific Water Storage Tanks).		 Inspect Tanks for Corrosion and Coating Conditions, Every 3 to 5 years. 		H, M, L
					 Install Motion Operated or Switch Operated Trouble Lights. 	н
					• Install Tank Cathodic Protection .	H,M, L
Walton Lake WTP Storage Tanks	1974	WL1-021	9	 Complete Grading and All Weather Surfacing of Tank Access Road. 		L
Hotchkiss Hill	1974	WL2-021	5	Repair / Replace Tank Water Supply Main.		н
				 Regrade, Improve Tank Access Road with All Weather Surfacing. 		н
				 Repair 1/2 Tank Level Gauge. 		H,M
Hotchkiss Hill Subtank	1974	WL2-021	5	• Furnish Pressure Reducer and Level Transmission Equipment.		н
					 Install Tank Mixing Equipment. 	н
Kelsey Tank	1990	WL10-021	7		Install Second Water Tank.	М
					 Install Tank Mixing Equipment. 	M, L

TABLE III-2 TREATED WATER FACILITIES

co	NS	UL	TIN	G
к	4	4 :	S	L
	G			

				RECOMMENDED ASSET IMPI	ROVEMENTS	PRIORITY
EXISTING ASSET	YEAR INSTALLED	(TEMP.) ASSET NUMBER ³	CONDITION SCORE (1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Furnish / Install New Asset; Replace Existing	H, M, L ⁽²⁾
• Garden Park	1976	WL9-021	7		 Install Second Water Storage Tank. Install Tank Mixing Equipment. 	M, L M, L
				 Regrade, Improve Tank Access Road with All Weather Surfacing. 		M
• Black Oak Mine	1975	WL7-021	5	 Conduct Site Grading, Drainage and Erosion Protection Improvements. 		М
				 Remove / Replace Tank Site Pavement. 		М
• Deer Ravine	1971	ALT2-021	5	 Replace / Upgrade Tank Altitude Valve Equipment and Vault. 		Н
• Spanish Dry Diggins	1997	WL4-021	7	• Wrap, Protect Pressure Reducer Sensing Line.	 Install Second Water Storage Tank. Install Tank Mixing Equipment. 	H L L
• Angel Camp	1972	ALT-021	2		 Install Second Water Storage Tank. Install Pressure Reducing Valve and Tank Bypass Piping. 	L, Н Н



TABLE III-2 TREATED WATER FACILITIES

				RECOMMENDED ASSET IMP	ROVEMENTS	PRIORITY
		(TEMP.)	CONDITION			
	YEAR	ASSET	SCORE		Furnish / Install New Asset;	(2)
EXISTING ASSET	INSTALLED	NUMBER ³	(1-10)(1)	Rehabilitate / Modify Existing Asset	Replace Existing	H, M, L ⁽²⁾
GDPUD Water Distribution and		(Refer to	Varies			
Transmission Main	1971-1991	Table VI-1)	1-9			
					 Replace Substandard PVC SDR 21 and PVC SDR 18 Pipelines with PVC Class 235 or 305 C900 Pipe Material per AWWA Standards; Min. Replacement Pipeline Size = 	Н, М
					 8 Inches. Schedule Replacement of Existing ACP Mains with PVC Class 235 or 305 C900 Pipe Material per AWWA Standards. 	M, L
					• Furnish and Install New Pipelines with Select Bedding, Backfill Material and Thrust Restraints.	H, M, L
• GDPUD Pressure Reducing Stations	1971-2022	(Refer to Table VI-2A & 2B).	Varies 1-7	 Replace / Upgrade Pressure Reducing Valve Equipment Installed in 1970's and 1990's. 		H,M
				 Replace / Upgrade Other Pressure Reducing Valve Equipment Over 20 Years Old. 		М
				 Install Joint Restraint and Pipeline Lining and Coating with PRV Station Upgrades. 		H,M
GDPUD Fire Hydrants	1971-1991		Varies 4-8	 Flow Test Fire Hydrants at Least Every 5 Years. 	 Install New Fire Hydrants and Replacement Hydrant Installation with Isolation Valves, Thrust Blocks and Snow Poles. 	н
					 Standardize New Fire Hydrant Installations. 	н



TABLE III-2 TREATED WATER FACILITIES

				RECOMMENDED ASSET IMP	ROVEMENTS	PRIORITY
EXISTING ASSET	YEAR INSTALLED	(TEMP.) ASSET NUMBER ³	CONDITION SCORE (1-10) ⁽¹⁾	Rehabilitate / Modify Existing Asset	Furnish / Install New Asset; Replace Existing	H, M, L ⁽²⁾
GDPUD Water Main Valves	1971-1991		Varies 4-8	• Exercise Water Main Valves Annually.	 Install Resilient Seated Wedge Type Valves, 200 psi Rated conforming to AWWA C 900 Standards. Standardize New Valve Installations. 	H H H
GDPUD Fire Flows	1971-1991		Varies 1-9	 Conduct Comprehensive Testing of GDPUD Hydraulic Network Model to Identify Long Term Treatment, Booster Pump and Storage Alternatives 	 Replace 4 Inch Diameter Water Mains with Minimum 8 Inch Diameter Mains. Increase Pipelines Within ALT Pressure Zones that do not Meet Minimum Fire Flow Standards (Refer to Section VI, Specific Locations). Increase Pipelines within WL Pressure Zones that do not meet Minimum Fire Flow Standards (Refer to Section VI, Specific Locations). 	M, L H, M, L H, M, L
 <u>Footnotes:</u> (1) Condition Score; 1= Poor to 10 = Very Good. (2) H, High, Short Term Priority, Recommended for Implementation 2024-2030. M, Moderate Term Priority, Recommended for Implementation 2030-2040. L, Low Term Priority, Recommended for Implementation 2040-2045. 				 (3) Temporary Asset Number WL-Walton Lake Treated Water System Plans ALT-Auburn Lake Trails (Sweetwater) Treated Water System Plans 020-Pump Stations 	022-Distribution Mains 023-Pressure Reducing Stations 024-Fire Hydrants 025-Distribution Main Isolation Val	ves

021-Storage Tanks